

LONG-TERM MONITORING OF THE BIRD FAUNA OF THE PORONGURUP RANGE, WESTERN AUSTRALIA

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ABSTRACT

The status of all bird species recorded in the Porongurup Range, south-west Western Australia, is assessed on the basis of 14 years of records made during the period 1974 to 1993. The number of species resident or probably resident increased from 26 (1974-79) to 29 (1984-93). Rather than indicating colonization of the Range, this increase reflects redefinition of the status of 5 species based on a longer time perspective. The number of species visiting remained steady at seven. Vagrant species (those present irregularly and not breeding) increased from 14 to 17.

INTRODUCTION

Bird communities are not static, as resident species fluctuate in abundance from year to year (Lack 1966) and other species arrive and depart erratically (Serventy and Whittell 1976). The problem in listing, over a short period, the bird species present in a well-defined area is that these ongoing changes make it difficult to determine the status of a substantial fraction of the species. Long-term monitoring of the species present in the same

locality provides the essential perspective for surmounting this difficulty.

On mainland south-west Western Australia there are few published reports of monitoring of the presence or absence of bird species in the same locality over more or less consecutive years by the same observer. A literature search revealed only six papers based on 10 or more years of monitoring, namely Carter (1923-4), Whittell (1933, 1938), Ford and Stone (1957), Sedgwick (1973), Masters and Milhinch (1974), and Dell and McGauran (1981).

This paper presents the results of nine years of records of bird species present in the Porongurup Range, 50 km north of Albany, south-west Western Australia. The status of the avifauna is re-appraised in relation to a shorter period of records (based on 55 days in 18 visits from 1974 to 1979) analysed by Abbott (1981). The Porongurup Range is mainly National Park (3 200 ha) dominated by Karri *Eucalyptus diversicolor* and Jarrah *E. marginata* forest but is now surrounded by agricultural land largely cleared of its natural vegetation (see maps in Abbott 1981).

METHODS

Records of all birds seen or heard during 146 days (24 visits) spent in the Range from 1984 to 1993 were collated, and on the basis of the information assembled the status of each bird species was determined (after Abbott 1981) as:

- R resident or present all year
VI visitor or not present all year (separated further into breeding or not breeding)
V vagrant as well as probable R, probable VI and probable V.

Actual dates of visits were as follows:

- 1984 20–25 (inclusive) April, 2–4 June, 29 September–1 October, 23–30 December
1985 5–9 April, 31 August–8 September, 25 December–1 January 1986
1986 28–31 March, 23–28 June, 14–19 September
1987 31 December 1986–4 January, 7–12 September, 23–30 December
1988 1–5 April, 30 October–5 November, 24–30 December
1989 21–28 December
1990 13–18 April, 11–16 September, 23–30 December
1991 23–30 September
1992 27 December 1991–3 January, 17–20 April
1993 8–9 May

No visits were made in February or July. Most visits took place in December, September and April.

RESULTS

Annotated list of bird species

Species listed [in brackets] are those

for which I have no new information to add to the account provided in Abbott (1981). Nomenclature and sequence follow Storr (1991) and Dell (pers. comm.).

Non-passerines

Tadorna tadornoides Mountain Duck

New record. V. 3 birds briefly perched on tree, Mira Flores, May 1993.

Accipiter cirrhocephalus Collared Sparrowhawk

VI. Single birds recorded once in November 1988, September 1990 and December 1991. When these records are combined with those from Abbott (1981), this species has only been recorded from September to January. Listed by Abbott (1981) as ?.

Aquila audax Wedge-tailed Eagle

V. Single bird March 1986. This species is better categorized as V rather than as ?.

Falco longipennis Australian Hobby

V. 2 birds December 1990.

Coturnix ypsilophora Brown Quail

Probable R. Quail were seen briefly in June 1984, September 1985, June 1986, September 1991 and were heard calling in September 1985, September 1986, September 1987 and November 1988. Previously listed as ?

Turnix varia Painted Button-quail

New record. Probable V. 1 pair Mira Flores, April 1990.

Phaps chalcoptera Common Bronzewing

V. Observed June 1984, December 1984, December 1985, June 1986, September 1986, December 1986,

December 1987, November 1988, April 1990, September 1990, December 1990, September 1991, April 1992. This species was particularly numerous in December 1985 and April 1990.

Ocyphaps lophotes Crested Pigeon
New record. V. Several recorded at south end of Mira Flores, September 1985.

Glossopsitta porphyrocephala Purple-crowned Lorikeet
VI Breeding. Recorded on most visits, contrary to Abbott (1981). It was particularly abundant when Karri flowered profusely, as in June 1986, September 1991 and April 1992. Seen inspecting hollows in Karri in September 1986.

Platycercus zonarius Ring-necked Parrot
New record. V. Several recorded at south end of Mira Flores in June 1984 and September 1985.

Platycercus icterotis Western Rosella
R. Observed eating immature fruits of Marri *Eucalyptus calophylla* (April 1988), grass heads in pasture (November 1988) and fruits of *Agonis hypericifolia* (April 1990).

Calyptorhynchus latirostris Carnaby's Cockatoo
VI. All records fall between September and April, except for one record in June 1984. Abbott (1981) gave the limits as September and March. Observed feeding on fruits of *Hakea varia* and flowers of *Dryandra formosa*.

Calyptorhynchus magnificus Red-tailed Black Cockatoo
New record. V. A flock of 6 birds was seen west of Mira Flores in the National Park in December 1991.

Cacomantis flabelliformis Fan-tailed Cuckoo

VI Breeding. All records fall between September and December (Abbott 1981 reported limits as July and January). Young seen in December.

Chrysococcyx lucidus Shining Bronze Cuckoo

VI Breeding. All records fall between September and December (cf July – December in Abbott 1981). Most often recorded in September. Immature seen in December 1990.

Ninox novaeseelandiae Boobook Owl
Rare R. Only recorded in September 1985, December 1985, September 1987, December 1990, September 1991 and December 1991. Listed as probable R by Abbott (1981).

Podargus strigoides Tawny Frogmouth

Rare R. Recorded December 1987 and May 1993, as well as February 1986 (L. K. Abbott, pers. comm.). A fledgling was seen in December 1987. Listed as ? by Abbott (1981).

[*Dacelo gigas* Laughing Kookaburra R.]

Passerines

Hirundo nigricans Tree Martin

VI Breeding. Recorded April 1985, otherwise all records September to January. Abbott (1981) noted limits as September to March.

Coracina novaehollandiae Black-faced Cuckoo-shrike

V. Recorded 7 times, all September to December except for record in April 1990. Heard often in September 1985, otherwise usually recorded as single bird per visit. Listed as Probable V by Abbott (1981).

[*Petroica multicolor* Scarlet Robin
R].

[*Eopsaltria australis* Yellow Robin
R].

[*Eopsaltria georgiana* White-breasted
Robin
R].

[*Pachycephala pectoralis* Golden
Whistler
R].

[*Colluricincla harmonica* Grey Shrike-
thrush
R]

Falcunculus frontatus Crested Shrike-
tit

New record. Probable R. 1 pair seen
in Karri at east end of Range,
September 1991. The male foraged
2–3 m above ground on strips of
Karri bark caught in branches of
Trymalium spathulatum. These birds
did not call but were not shy. For
details of a pre-1979 record, see
Abbott (1981).

[*Rhipidura fuliginosa* Grey Fantail
R].

Rhipidura leucophrys Willie Wagtail
New record. V. 1–2 birds at southern
end of Mira Flores close to farm in
April 1989 and May 1993.

Myiagra inquieta Restless Flycatcher
V. Two records: September 1984 and
December 1985. Categorized as R in
Abbott (1981).

Gerygone fusca Western Flyeater
VI. Recorded once in April 1988
(first week); otherwise all records
September–December. Abbott (1981)
recorded it from September to
March.

[*Acanthiza apicalis* Broad-tailed
Thornbill
R].

[*Acanthiza inornata* Western
Thornbill
R].

[*Acanthiza chrysorrhoa* Yellow-
rumped Thornbill
R].

[*Sericornis frontalis* White-browed
Scrubwren
R].

Malurus splendens Splendid Fairy-
wren

V. Recorded April 1985, December
1985, December 1986, December
1987, December 1988, December 1989,
April 1990, September 1990,
December 1990, April 1992. All
records in southern Mira Flores
except single record in National
Park.

Malurus elegans Red-winged Fairy-
wren

R. Recorded additionally in karri
forest high up slopes in September
1987.

Neositta chrysoptera Australian
Sittella

Probable R. One record of a flock of
6 birds in September 1990.

Climacteris rufa Rufous Treecreeper
R. Listed by Abbott (1981) as
Probable R.

Pardalotus punctatus Spotted
Pardalote

R. Listed as VI breeding, present
July – December, by Abbott (1981).

Pardalotus striatus Striated Pardalote

R. This species is not as commonly
heard as in forest around
Manjimup.

Zosterops lateralis Grey-breasted
Silvereye

R. Observed feeding on fruits of
Leucopogon verticillatus.

Lichmera indistincta Brown Honeyeater

V. Recorded September 1986 (widespread), December 1986 (once), September 1987, April 1988, September 1991 and December 1991.

Melithreptus lunatus White-naped Honeyeater

R. Observed feeding at Marri flowers in April 1988 and feeding young in November 1988.

Phylidonyris novaehollandiae New Holland Honeyeater

R. Observed feeding at flowers of *Banksia littoralis* in April 1990 and May 1993.

Phylidonyris melanops Tawny-crowned Honeyeater

V. Heard in December 1985 and September 1987 (each single bird).

Acanthorhynchus superciliosus Western Spinebill

R. More numerous than reported by Abbott (1981). Observed feeding at flowers of *Calothamnus* sp., *Dryandra formosa*, *Banksia grandis* and Marri.

Anthochaera carunculata Red Wattlebird

V. Recorded at all times of year (single – few birds) but very abundant when Karri or Marri is flowering. Actual records: June 1986, September 1986, September 1987, April 1988, September 1991, April 1992.

Stagonopleura oculata Red-eared Firetail

New record. Probable R. One in Karri forest at Mira Flores in April 1985; 2 in thickets near summit of Nancy Peak in September 1990.

Grallina cyanoleuca Magpie-lark
New record. V. 2, Mira Flores, April 1988

Artamus cyanopterus Dusky Woodswallow

New record. V. One to several: December 1984, September 1985 and December 1989.

[*Cracticus tibicen* Australian Magpie R].

Strepera versicolor Grey Currawong
R. Fledgling observed in December 1990.

[*Corvus coronoides* Australian Raven R].

Changes in status of bird species, 1974–79 vs 1984–93

The allocation of each species to one of the six categories is summarized in Table 1. Note that a minor error in Table 1 of Abbott (1981) has been corrected. Ten bird species were newly recorded in the period 1984–93, and five species recorded for the period 1974–79 were not recorded subsequently. These species are listed in Table 2.

The additional records collected in 1984–93 allowed the number of species placed in the probable R and probable V categories to be considerably reduced. This resulted in the R and V categories having more species assigned to them. Doubt now remains about the correct placement of only five species. These are Brown Quail, Crested Shrike-tit, Australian Sittella and Red-eared Firetail (Probable R) and Painted Button-quail (Probable V).

DISCUSSION

The additional nine years of records, when combined with a recent authoritative synthesis of

Table 1. Numbers of bird species recorded in the Porongurup Range over a 20 year period. R = resident species; VI = visitor; V = vagrant
The number of species visiting and recorded breeding is shown in parentheses

Status	1974-1979			1984-93		
	Non-passerines	Passerines	Total	Non-passerines	Passerines	Total
R	2	19	21	4	21	25
Probable R	2	3	5	1	3	4
VI	4	3(2)	7(2)	5(3)	2(1)	7(4)
V	1	6	7	7	9	16
Probable V	6	1	7	1	0	1
<i>Total</i>	15	32	47	18	35	53

Table 2. Summary of change in the avifauna of the Porongurup Range, based on comparison of records in 1974-79 and 1984-93 R = resident species; VI = visitor; V = vagrant

Change of status	Species	Number of species
<i>Type of change</i>		
Probable R to R	Boobook Owl, Tawny Frogmouth, Rufous Treecreeper, Western Spinebill	4
VI (breeding) to R	Spotted Pardalote	1
Probable V to Probable R	Brown Quail	1
V to VI (breeding)	Collared Sparrowhawk	1
Probable V to V	Wedge-tailed Eagle, Australian Hobby, Black-faced Cuckoo-shrike	3
R to V	Restless Flycatcher	1
<i>New record (with status)</i>		
V	Mountain Duck, Crested Pigeon, Ring-necked Parrot, Red-tailed Black Cockatoo, Willie Wagtail, Magpie-lark, Dusky Woodswallow	7
Probable V	Painted Button-quail	1
Probable R	Crested Shrike-tit, Red-eared Firetail	2
<i>No further record (with previous status)</i>		
Uncertain status	Peregrine Falcon	1
V	Australian Kestrel, Pallid Cuckoo, Rufous Whistler, Weebill	4

the biogeography of bird species in south-west Western Australia (Storr 1991), have resulted in upgrading of the status of 12 species. Species have been re-allocated from the probable R or probable V categories to R or V categories respectively. The only misallocation evident from comparing the 1974-79 and 1984-93 data is the downgrading in status of the Restless Flycatcher from R to V.

Three species visiting the Range have not yet been recorded as breeding, although it is probable that they do. These are the Collared Sparrowhawk, Carnaby's Cockatoo and Western Flyeater.

It is very likely that future records of bird species present in the Porongurup Range will slowly increase the number of new, vagrant species. Indeed, given sufficient time, nearly every landbird species present within 50 km of the Range should be recorded there at least once. In contrast, it is not likely that many, new residential species remain to be detected. The Painted Button-quail (here categorized as probable V) and the Australian Owlet-nightjar *Aegotheles cristatus* (not recorded but stated by Storr (1991) to be apparently, only a late summer/autumn visitor to the deep south-west) may prove to be very rare residents of the Porongurup Range.

Two of the species reported in the Porongurup Range by Abbott (1981, this paper) possibly conflict with biogeographic information provided by Storr (1991). I recorded the Collared Sparrowhawk within the period September to January,

which is the breeding season of this species. Storr (1991), however, states that this species does not breed south of the Stirling Range. His notes on the distribution and movements of the Brown Goshawk *Accipiter fasciatus* accord better with my records of the Collared Sparrowhawk. Although I had good views of most of the birds seen and was able to diagnose clearly the square-edged tail of the Collared Sparrowhawk, this characteristic is not a reliable method of discriminating between the species (R. Johnstone, pers. comm.). Future visitors should be aware of this uncertainty and attempt to clarify identity and breeding of the *Accipiter* species recorded there.

I have identified the white-tailed black cockatoo in the Porongurup Range as Carnaby's Cockatoo, whereas Storr (1991) listed it as Baudin's Cockatoo *Calyptrorhynchus baudinii*. I based my identification on the shape of the beak, which I have often had the opportunity of seeing on birds at close range. A map (Saunders 1974) of the geographic range of both species, based on collected specimens, indicates possible overlap between the species in the vicinity of the Porongurup Range. However, a later map (Saunders 1979), records only Carnaby's Cockatoo for the Porongurup Range. R. Johnstone (pers. comm.) has informed me that both species have been recorded from the Porongurup Range.

The Jacky Winter *Microeca leucophaea*, recorded before 1921 but not since, is treated by Storr (1991) as a misidentified White-breasted Robin. It should also be noted that

the Crested Shrike-tit was recorded previously in 1967 but was not found during the 1974–9 surveys.

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